

MULTIPLE ANTENNA ABLATION APPARATUSABSTRACT

An ablation apparatus has a multiple antenna device of adjustable length including an adjustable length primary antenna and an adjustable length secondary antenna. The primary antenna has a longitudinal axis, and the secondary antenna is deployed in a direction lateral to the longitudinal axis.

5 The secondary antenna is constructed to be structurally less rigid than the primary antenna. The adjustable lengths of the primary and secondary antennas permits a desired geometric ablation of a selected tissue mass. An adjustable insulation sleeve is positioned on an exterior of one of the primary or secondary antennas. An energy source is connected to the multiple antenna device. A
10 variety of energy sources can be used including RF, microwave and laser.